**To:** Distribution

From: Bob Hunnicutt, Tower Coordinator, Columbia Telecommunications

A meeting of the Transmission Facility Coordinating Group (TFCG) was held on October 7, 2009. The following people were in attendance:

# **MEMBERS**

| Marjorie Williams    | OCCS    | (240) 777-3762 |
|----------------------|---------|----------------|
| Helen Mu (via phone) | DTS     | (240) 777-2804 |
| Mary Pat Wilson      | MCPS    | (240) 314-4707 |
| John Cuff            | OMB     | (240) 777-2762 |
| Carlton Gilbert      | M-NCPPC | (301) 495-4577 |

#### <u>STAFF</u>

| Mitsuko Herrera | OCCS | (240) 777-2829 |
|-----------------|------|----------------|
| Bob Hunnicutt   | CTC  | (301) 933-1488 |
| David Doulong   | CTC  | (301) 933-1488 |

## OTHER ATTENDEES

| O II IE I V / V I I E I I I E E E |                         |                                |
|-----------------------------------|-------------------------|--------------------------------|
| Hillorie Morrison                 | NB&C/T-Mobile           | hillorie.morrison@t-mobile.com |
| Amy Bird                          | NB&C/T-Mobile           | amy.bird@t-mobile.com          |
| Adam Knubel                       | NB&C/Clearwire          | aknubel@nbcllc.com             |
| Charles Ryan                      | for Verizon             | cryan@wireless-enterprises.com |
| Paul Whitley                      | NB&C/Cricket            | pwhitley@nbcllc.com            |
| Gordon Hubley                     | Clearwire               | ghubley@goodmannetwork.com     |
| Greg Rapisorda                    | Saul Ewing              | grapisorda@saul.com            |
| Sean Hughes                       | Sean Hughes Law Offices | 3                              |
|                                   |                         |                                |

**Action Item – Meeting Minutes**: Mary Pat Wilson moved the minutes be approved as written. John Cuff seconded the motion and the minutes were unanimously approved.

## Action Item - Consent Agenda Applications:

- 1. Verizon Wireless application to replace nine panel antennas with 15 panel antennas at the 98' level atop the 83' high Potomac Water Filtration Plant located at 12200 River Road in Potomac (Application #200804-10).
- 2. Clearwire application to attach dish antennas at the 150' level of the 16-story Classic Residence building located at 8100 Connecticut Avenue in Chevy Chase (Application #200907-19).
- 3. Clearwire application to attach two dish antennas at the 73' level atop the Phillips Office Building located at 9420 Key West Avenue in Rockville (Application #200907-20).
- 4. Clearwire application to attach two dish antennas at the 108' level on the penthouse of the Columbia Towers building located at 12001 Old Columbia Pike in Silver Spring (Application #200907-31).
- 5. Clearwire application to attach one dish antenna at the 175' level of the 161' Promenade apartment building located at 5225 Pooks Hill Road in Bethesda (Application #200907-36).

- Clearwire application to attach three dish antennas at approximately the 111', 114', and 117' levels of a 117' monopole on Leaman property located at 13820 Clopper Road in Boyds (Application #200908-06).
- 7. Clearwire application to attach three dish antennas at the 58' level atop the 54' Meadows building located at 12501 Prosperity Drive in Silver Spring (Application #200908-10).
- 8. Clearwire application to attach three dish antennas at the 52' level atop the 45' Crossroads Building property located at 7676 New Hampshire Avenue in Takoma Park (Application #200908-11).
- 9. Clearwire application to attach two dish antennas at the 125' level of a 120' monopole on MDOT/SHA property located at I-270 & Montrose Road in Rockville (Application #200908-47).
- 10. Cricket application to attach three antennas at the 170' level of a 200' monopole on Damascus VFD #13 property located at 10211 Lewis Drive in Damascus (Application #200909-01).
- 11. Cricket application to attach three antennas at the 100' level on the 127' WSSC Brink water tank located at 21701 Ridge Road in Germantown (Application #200910-04).
- 12. Clearwire application to attach three dish antennas at the 119' and 121' levels of a 116' building located at 962 Wayne Avenue in Silver Spring (Application #200910-10).
- 13. Clearwire application to attach three panel antennas at the 68' level and two dish antennas at the 73' levels of the 98' monopole on Wheaton High School property located at 12501 Dalewood Drive in Silver Spring (Application #200910-12).
- 14. Clearwire application to attach three antennas at the 75' and two dish antennas at the 80' level of a 99' monopole on Springbrook High School property located at 201 Valley Brook Drive in Silver Spring (Application #200910-13).

**Motion:** Carlton Gilbert moved the Consent agenda items 1-12 be recommended. John Cuff seconded the motion and it was unanimously approved. John Cuff moved the Consent agenda items 13 and 14 be recommended. Helen Mu seconded the motion and it was approved with Mary Pat Wilson abstaining from votes on Items # 13 and 14.

**Action Item:** Clearwire application to attach three dish antennas at the 187' level of the 178' Berkshire Towers (The Enclave) apartment building located at 11235 Oak Leaf Drive in Silver Spring (Application #200907-28).

Bob Hunnicutt noted a correction to the Recommendation form to show that the application is recommended conditioned on resolving any interference with the County's public safety radio that should arise. He noted that the dish antennas are pointed at the County's antennas that are on an adjacent building, and could potentially cause interference.

**Motion:** Mary Pat Wilson moved the application be recommended as conditioned by the Tower Coordinator. Carlton Gilbert seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach three dish antennas at the 185' level of the 190' monopole located at 16801 Oakmont Avenue in Gaithersburg (Application #200907-32).

Bob Hunnicutt summarized the application and noted that the recommendation was conditioned on submission of a structural analysis.

**Motion:** Carlton Gilbert moved that the application be recommended as conditioned by the Tower Coordinator. John Cuff seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach three dish antennas at the 87' level of a 140' monopole on Seneca Ayr Farm property located at 13100 West Old Baltimore Road in Boyds (Application #200908-38).

John Cuff asked for an explanation regarding the Cricket structural analysis and noted that the application number for the Cricket attachment would be helpful to have noted on the recommendation form.

Bob Hunnicutt said he would put the application number on the Record of Action form. He also explained that Cricket, the last applicant to attach antennas to this tower, submitted a structural analysis report that said modifications to the foundation were needed to be made before Cricket's antennas could be mounted.

Mr. Hunnicutt noted that Clearwire also submitted a structural analysis with this application but it did not include Cricket's antennas in the calculations. Consequently, the recommendation is conditioned on Clearwire submitting a structural analysis that includes the calculations for the Cricket antennas and cabling as well as making any additional accommodations required to accommodate Clearwire's antennas.

Ms. Herrera asked who checked to see if Cricket's modification work was completed. Mr. Hunnicutt explained that DPS inspectors usually performed that task.

Marjorie Williams asked why the group would want to recommend so many applications conditioned on a structural analysis rather than have the structural analysis in hand when they review the application.

Bob Hunnicutt explained that in the past in the interest of expediting the applications, the TFCG agreed to take action on an item if there were structural concerns by conditioning the recommendation on the submission of a structural analysis at the time of permitting. The condition in the Record of Action that the carrier provides to permitting services will alert the DPS staff that a structural analysis is needed.

Ms. Herrera asked the carrier representatives at the meeting how long it took to obtain a structural analysis and why the TFCG could not have that at the time they conduct their review.

Adam Knubel replied that a structural analysis takes approximately six to eight weeks and while the permit application is in process the carriers can concurrently obtain and provide the structural analysis to the permitting staff.

Paul Whitley explained that the carriers are reluctant to pay several thousand dollars for a structural analysis before the application clears the TFCG because if the application is not approved the structural analysis may not be necessary. He added that it is a requirement to obtain a permit to have the structural analysis submitted to DPS.

Ms. Herrera said that she would like to consider changing the way the TFCG reviews the applications to include the structural analysis at the time the application is before the TFCG.

Ms. Williams noted that if it was something the carrier representatives are going to have to do anyway, it makes sense to wait until the analysis is done before the TFCG reviews an application. She said she would check with Dave Niblock to ascertain how permitting considers the structural analysis and whether it is appropriate to change the way the TFCG is reviewing these applications where a structural analysis may be warranted. She added that it was not her intent to hold up the progress of reviewing the applications but she would check with Dave Niblock.

**Motion:** Carlton Gilbert moved that the application be recommended as conditioned by the Tower Coordinator. John Cuff seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach a total of five dish antennas at the 93' and 96' levels of a 190' monopole on Gate of Heaven property located at 13801 Georgia Avenue in Silver Spring (Application #200909-

Bob Hunnicutt summarized the application noting that the recommendation is conditioned on submission of a structural analysis report.

**Motion:** Carlton Gilbert moved the application be recommended as conditioned by the Tower Coordinator. John Cuff seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach five dish antennas at the 144' level of a 150' monopole on Colesville Center property located at 49 Randolph Road in Colesville (Application #200909-13).

Bob Hunnicutt summarized the application noting that the recommendation is conditioned on submission of a structural analysis report.

**Motion:** Carlton Gilbert recommended the application be recommended as conditioned by the Tower Coordinator. John Cuff seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach three panel antennas at the 145' and one dish antenna at the 149' level of a 149' PEPCO transmission line tower #689-E located at 17336 Evangeline Lane in Olney (Application #200908-14).

Bob Hunnicutt summarized the application noting that the recommendation is conditioned on meeting the requirements of §59A-6.14 for screening the equipment on the ground.

**Motion:** John Cuff moved that the application be recommended. Mary Pat Wilson seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach one dish antenna at the 135' and three panel antennas at the 139' level of a 139' PEPCO transmission line tower #620-N located at 12457 Falconbridge Road in North Potomac (Application #200908-15).

Bob Hunnicutt summarized the application noting that the recommendation is conditioned on meeting the requirements of §59A-6.14 for screening the equipment on the ground.

**Motion:** John Cuff moved that the application be recommended. Mary Pat Wilson seconded the motion and it was unanimous.

**Action Item:** Cricket application to attach three antennas at the 108' level of a 125' PEPCO transmission line tower #59-S located at 17125 Germantown Road in Germantown (Application #200910-02).

Bob Hunnicutt noted since zone RDT is an agricultural zone and does not require screening, the condition was not applicable and therefore the recommendation was without conditions.

**Motion:** John Cuff moved that the application be recommended. Mary Pat Wilson seconded the motion and it was unanimously approved.

**Action Item:** Clearwire application to attach three panel antennas at the 128' level and one dish antenna at the 124' level of a PEPCO transmission line tower #640-S located at Glen Mill Road & White Clover Terrace in Potomac (Application #200910-06).

Bob Hunnicutt summarized the application noting that the recommendation is conditioned on meeting the requirements of §59A-6.14 for screening the equipment on the ground.

**Motion:** Mary Pat Wilson moved that the application be recommended as conditioned by the Tower Coordinator. Helen Mu seconded the motion and it was unanimously approved.

**Action Item:** Cricket application to attach three panel antennas at the 110' level on a proposed 10' extension atop a 100' monopole on Extra Space Storage property located at 19500 Frederick Road in Germantown (Application #200908-51).

Bob Hunnicutt summarized the application noting that this was an application to attach antennas to a proposed 10' extension at the top of a 100' monopole. He asked Marty Liebman to summarize his review of the RF maps submitted to support the need for the increased height.

Mr. Liebman explained that the carrier submitted RF maps with antennas at the 70' level, the space presently available on the monopole, and with antennas at 110'. He stated that based on the coverage objective noted by Cricket, it appeared that antennas at 70' provided some service to the target coverage area; however antennas at the 110' level would likely provide coverage to a significantly larger service area which he believed supported the need for the additional height.

John Cuff asked if a structural analysis should be required for this application.

Bob Hunnicutt explained that since Cricket would be only the fourth carrier on this monopole he did not think that would be necessary. He added that the TFCG had asked the Tower Coordinator to note when structural analysis might be important if it appeared as though the monopole was very fully loaded or appeared to be in a deteriorated condition. He said that this monopole did not appear to meet either of those conditions.

**Motion:** Carlton Gilbert moved the application be recommended. Mary Pat Wilson seconded the motion and it was unanimously approved.

**Action Item:** T-Mobile application to construct a new 95' high monopole on Northlake Apartments property located at 14001 Grey Eagle Court in Germantown (Application #200902-03).

Bob Hunnicutt summarized the application noting that the zone for this application was incorrectly stated on the Recommendation form. He said that the zone is PD-9, not RDT. He explained that because the zone is PD-9, the construction of this monopole, in addition to requiring a Special Exception will also require a developmental plan review and amendment. The developmental plan and amendment will also require review and approval by the County Council. Consequently, the recommendation is conditioned on approval of a Special Exception by the Board of Appeals and approval by the Planning Commission and the County Council for a modification to the developmental plan.

Mr. Hunnicutt noted that he was provided with information about five alternate structures that were considered but ruled out as options in lieu of a new monopole, mostly for RF reasons. He explained that the monopole is a slim-line design with four bays for three antennas each. T-Mobile planned to place antennas in the top two bays leaving two others for future co-locators as required by the zoning ordinance. He noted, however, that based on the site plans it did not appear as though the equipment area was large enough to accommodate equipment from future carriers as is also required by the zoning ordinance. He said based on the review of the TFCG database there is at least one other carrier who is currently seeking to place antennas within a mile of this location.

Amy Bird explained that when she saw the remarks about the equipment area space in the Tower Coordinator's recommendation she looked again at the plans and understood why it may appear that way. She explained that there is a faint line drawn on the plans which is intended to be additional equipment area space but she noted the line is barely visible. She submitted an enlarged copy of the plans pointing out the area to which she referred.

Mr. Hunnicutt explained that if that was the case he suggested that they revise the plans to make it clear which space is additional space for future carrier's equipment. He added that it appears as though the monopole meets setback requirements. He said that the location for the monopole is situated behind the apartment complex alongside the CSX rail lines and there is a heavily wooded area surrounding the property which may screen views of the monopole for most of the residents. He noted however that based on the photo simulations submitted with the applications it appears as though some residents may see the very top of the monopole. He asked Marty Liebman to explain his review of the RF documentation which supported why the nearby existing structures could not be used to support these antennas.

Mr. Liebman explained that most of the sites identified at the time of the Tower Coordinator's site visit and by the applicant were ruled out because the structures were too short to provide antennas at sufficient height to meet the coverage objective of providing indoor residential service to the many residential areas that surround the site. He added that although antennas at lower elevations may provide partial coverage to the target service area, antennas at the 95' level better blanketed the residential areas with signal levels sufficient for providing reliable indoor service. He noted that since the RF maps are based on theoretical models drive test results could better determine whether antennas at a lower elevation might provide the desired coverage; however, no drive test results were provided.

Greg Rapisorda noted that the County's review of the Special Exception and the development plan review could likely be made concurrently.

Carlton Gilbert explained that the hearing examiner would make a recommendation on both aspects of this application, submitting the Special Exception recommendation to the Board of Appeals, and the development plan review to the County Council.

**Motion:** John Cuff moved that the application be recommended as conditioned by the Tower Coordinator. Mary Pat Wilson seconded the motion and it was approved with Carlton Gilbert abstaining.

**Action Item:** T-Mobile application to construct a new 120' monopole on the Milton property located at 18420 White's Ferry Road in Poolesville (Application #200908-45).

Bob Hunnicutt summarized the application noting that based on the site visit there are no other existing structures to which T-Mobile could attach antennas to meet their coverage objectives. He added that there is a water tank in the town of Poolesville where most of the carriers have antennas, including T-Mobile, but that site is too far west to improve service along Rt. 107 toward its intersection with Rt. 28 which is the objective for these antennas.

He noted that because the location for the monopole is, for the most part, surrounded by open pastureland the monopole will be very prominent on the landscape and will be seen by all passers-by going to and coming from Poolesville. He added that Rt. 107 was a heavily travelled road due to not only commuting traffic from Poolesville to downtown areas, but also from traffic coming into the county from Virginia via White's Ferry and points north along that roadway.

Mr. Hunnicutt said that the monopole was originally designed to be disguised as a flagpole but since the application was filed, the carrier had redesigned the structure to be a slim-line monopole which would to support antennas from up to two other carriers as T-Mobile is using two of the top bays for its antennas leaving two lower bays for co-locators.

Mr. Hunnicutt added however that the ground space shown on the site plans does not include space for additional carrier's equipment. He said the applicant reported that this is because the property owner wishes to directly lease additional ground space to co-locators. Consequently, his recommendation for this monopole is conditioned on approval of a Special Exception by the Board of Appeals and the Board's consideration of permitting the site to be constructed without ground space included for co-locators equipment.

Mr. Hunnicutt noted that the applicant had submitted RF maps supporting the need for the facility and the height of the support structure and asked Marty Liebman to summarize his review of those RF maps.

Mr. Liebman stated that the coverage objective was to improve service to residents in the eastern side of Poolesville with signal levels adequate to support in-building services as well as to improve signal levels east of the proposed site of the monopole to signal levels capable of improving in-vehicle coverage along Route 107 and Route 28.

Mr. Liebman said that based on his review of the RF maps submitted for antennas at the 120' level, the 100' level, and the 80' level above ground, it appeared that antennas even at the 120' level did not fully meet the stated coverage objectives. He said based on the RF maps some of the homes intended to be better served may not be because signal levels are not shown on the maps to be at signal strength to provide reliable inbuilding coverage. He said the same was true for in-vehicle service along Route 107 and there were still some gaps in coverage where in-vehicle signal levels were not shown on the RF maps. He added that drive test results could better document whether that may be the case or whether antennas at lower elevations might work to meet the coverage objective.

Mr. Liebman noted the RF maps with antennas at the 100' and 80' levels looked as though the service to the

residential areas was not much different than that which may be obtained with antennas at the 120' level. He said that was not the case, however, for in-vehicle coverage along Rt. 107 where the lower antennas did not meet these coverage objectives. He concluded that for those purposes, the antennas needed to be at the 120' level as proposed by T-Mobile. He added that antennas at the 120' level also improved in-vehicle coverage south of the proposed site along Partnership Road, for example.

Mitsi Herrera asked why the design had been changed from a stealth flag structure. Hillorie Morrison replied that the issues involved with rising and lowering the flag became problematic for the property owner and he opted not to have a flag on the structure.

Mr. Hunnicutt added that in addition to raising and lowering the flag, if the flag was not to be lowered each day, it is required to be illuminated at night which would make the structure much more prominent on the horizon to the resident's of Poolesville.

Marjorie Williams stated that she thought there might be some objection to this structure because it would be so visibly prominent.

Mary Pat Wilson asked if the public notice procedures for Special Exception make residents aware of the fact that there are alternative designs that might have less impact in the community.

Mr. Hunnicutt replied that probably was not the case through the public notice process, unless it was mentioned in the record available for review. He said that based on his experience, if people truly object to a new monopole, they find alternatives on their own. Options could include for example, a distributed antenna network, or a flag pole or tree pole design that might make the support structure better blend in with the surrounding community. He stated that, in this case, a disguised monopole design may make the structure even more prominent than the simple slim-line design because there is nothing as tall as the structure near the proposed monopole.

**Motion:** John Cuff moved that the application be recommended as conditioned by the Tower Coordinator. Helen Mu seconded the motion and it was approved with Carlton Gilbert abstaining.

#### Discussion Item - Design Changes for Previously Recommended Applications:

T-Mobile application #200907-15 @ Cedarburg Monopole: 23700 Stringtown Road, Clarksburg.

Bob Hunnicutt reported that he had been advised by the applicant that the Planning Commission had determined that the location for the monopole was in a protected forest conservation area and T-Mobile had consequently redesigned the site to relocate the monopole and equipment area at the end of the parking lot.

Hillorie Morrison stated that since her last discussion with Mr. Hunnicutt they had been in contact with the church representatives, who were not agreeable to that relocation. Consequently, T-Mobile would have to go back to the Planning Board staff and see if another alternative is available or if they can reconsider the monopole being placed where it was originally proposed. She reported that she would advise the group of the outcome of those meetings as soon as a decision was reached.

The next meeting of the TFCG is scheduled for Wednesday, November 4, 2009 at 2 p.m. in the second floor conference room #225 of the COB.